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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/784,703	02/24/2004	Sang-Hyuk Im	IK-0076	1474

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CHANTILLY, VA 20153

EXAMINER

VU, MICHAEL T

ART UNIT	PAPER NUMBER
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2617

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/09/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/784,703

Applicant(s)

IM ET AL.

Examiner

Michael Vu

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6, 8-20 and 22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-20 and 22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 13, 2006 has been entered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-2, 6, 8, 10-12, 14-16, 18-20, and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Shindo (US 5,661,641).

Regarding **claims 1, 8, 10, 19, and 22**, Shindo teaches a slide type portable terminal (Figure 7), comprising: a main unit (Figure 7, #2) that includes separated first (Fig. 7, shows Element #25, CLR, STO, and F Keys) and second key sections exposed in a surface of the main unit (Fig. 6, MODE, and Error Keys), wherein the first key (Fig. 7, shows Element #25, CLR, STO, and F Keys) section performs a first functionality (Col. 3, lines 23 through Col. 6, lines 43) and the second key (Fig. 6, MODE, and Error Keys) section performs a second functionality different than the first functionality (Col. 4, lines 41 through Col. 7, lines 52); and a display unit (Fig. 6, #31) that includes a display screen exposed to a front surface of the display unit (Fig. 6), wherein the display unit is configured to slide relative to the surface of the main unit to cause the first and second key sections of the main unit to be selectively exposed (Col. 3, lines 23 through Col. 6, lines 43), wherein the display unit can be selectively slid to a first position where both the first and second key sections of the main unit are exposed (Figures 6-7), a second position where only one of the key sections is exposed, and a third position where both the first and second key sections are not exposed (Figure 8), and further comprising a third separate input section being function buttons on an upper surface of the display unit (Figure 8, Third Position Col. 6, lines through Col. 8, lines 4).

Regarding **claim 2**, Shindo teaches a slide type portable terminal of claim 1, comprising a stopper mechanism configured to allow the display unit to be stopped at the second position where said only one of the key sections is exposed (Fig. 7, Col. 6, lines 14 through Col. 7, lines 52).

Regarding **claim 6** Shindo teaches a slide type portable terminal of claim 1, wherein the separated first and second key sections are a number key section and a function key section that includes a microphone respectively (Figs. 6a- 6b).

Regarding **claim 11**, Shindo teaches a slide type portable terminal of claim 10, further teaches wherein the display unit can be selectively slid to a first position where both the first and second key sections of the main unit are exposed, a second position where only one of the key sections is exposed, and a third position where both the first and second key sections are covered (Figs. 6-8).

Regarding **claim 12**, Shindo teaches a slide type portable terminal of claim 11, further teaches wherein the first and second magnets cross over each other during movement between the first and second positions (Figs. 6- 8, Obvious).

Regarding **claim 14**, Shindo teaches a slide type portable terminal of claim 11, further teaches wherein the first and second magnets cross over each other during movement between the second and third positions (Figs. 6-8).

Regarding **claim 15**, Shindo teaches a slide type portable terminal of claim 10, comprising a touch screen input device removably attached to the portable terminal, wherein the display screen is a touch screen (Col. 2, line 7-33, particularly lines 30-33).

Regarding **claim 16**, Shindo teaches a slide type portable terminal of claim 10, further teaches comprising a stopper mechanism configured to temporarily fix the display unit to be stopped at a position where one of the key sections is exposed (Figs. 6-8).

Regarding **claim 18**, Shindo teaches a slide type portable terminal of claim 10, comprising a third separate key section being function keys on an upper surface of the display unit, wherein the separated first and second key sections are a number key section and a multi-media key section that includes a microphone, respectively (Figs 1-13).

Regarding **claim 20**, Shindo teaches a method of claim 19, wherein magnetic force assists movement between the first and second positions and between the second and third positions (Figs. 6-8).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3-5, 9, 13, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shindo in view of Mizuta (US 2003/0171133).

Regarding **claims 3, 13 and 17**, Shindo teaches a slide type portable terminal of claim 2, wherein the stopper mechanism includes a stopper groove affixed to one of the display unit and the main unit,

But Shindo does not clearly mention on a stopper spring coupled to the other one of the units to correspond to the stopper groove, wherein the stopper spring is selectively seated in the stopper groove.

However, Mizuta teaches a slide-type portable communication apparatus that releasable lock mechanism for releasably locking said main housing and said movable housing in which the housing stopped at a desired one of a plurality stop positions with respect to the main housing (See paragraph 0014-0023]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Shindo, such that a stopper spring coupled to the other one of the units to correspond to the stopper groove, wherein the stopper spring is selectively seated in the stopper groove, to secure the slide positions type for engaging with the main housing is freely slidable between a retracted state and an extended state.

Regarding **claim 4**, the combination of Shindo/Mizuta teach a slide type portable terminal of claim 1, wherein first and second magnets are correspondingly arranged on the main unit and the display unit, respectively, so that the same poles of the magnets face each other to provide a repulsive force when they are positioned to face close to each other [0014-0023] of Mizuta.

Regarding **claims 5 and 9**, the combination of Shindo/Mizuta teach a slide type portable terminal of claim 4, wherein corresponding sliding structures configured to perform sliding operations of the main unit and the display unit are provided on opposite lateral ends of the main unit and the display unit (Figs. 6-8) of Shindo.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Vu whose telephone number is (571) 272-8131. The examiner can normally be reached on 8:00am - 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on 571-272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Michael Vu
Examiner

JEAN GELIN
PRIMARY EXAMINER

